

Proposed FY 2006/07 Capital Improvement Plan (CIP)

Projects by Department / Project Name

Water Resources Department

TEMP436 - Sewer Security Enhancements

Est. Completion: 06/11 **Est. ITD Expenditures (2/06):** \$0.0 **Operating Impact: (07/08)** \$2.0

Location: Throughout the City

Description: Enhance security at wastewater facilities throughout the City by upgrading existing prevention, detection and response systems. This project results from recommendations developed by a security survey of all wastewater facilities in the City. Enhancements to existing security measures were identified in the areas of access control, security personnel, surveillance, intrusion detection, site hardening and back-up power.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Sewer Rates	550.0	150.0	550.0	150.0	550.0	1,950.0
	550.0	150.0	550.0	150.0	550.0	1,950.0

TEMP519 - Gainey Ranch Treatment Plant Rehabilitation

Est. Completion: 12/07 **Est. ITD Expenditures (2/06):** \$0.0 **Operating Impact:** \$0.0

Location: 7813 East Mountain View Rd.

Description: This project will rehabilitate the tertiary treatment portion of the Gainey Ranch Water Reclamation Facility. The Gainey Ranch Water Reclamation Plant incorporates a tertiary treatment process consisting of two traveling bridge sand filters. These filters have been in operation over 20 years which exceeds their anticipated useful life.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Sewer Rates	1,000.0	0.0	0.0	0.0	0.0	1,000.0
	1,000.0	0.0	0.0	0.0	0.0	1,000.0

TEMP523 - SROG - CMOM Program

Est. Completion: NA **Est. ITD Expenditures (2/06):** \$0.0 **Operating Impact:** \$0.0

Location: City of Phoenix

Description: Provide for capital expansion, modifications and improvements at the 91st Avenue Wastewater Treatment Plant, according to existing intergovernmental agreements with the Sub-Regional Operating Group (SROG). The City of Scottsdale will continue to send a portion of its wastewater to the City of Phoenix's treatment facility, even though the Water Campus is up and running. The City of Scottsdale will be sending all of its wastewater south of Doubletree Ranch Road alignment to the 91st Avenue treatment plant.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Sewer Rates	3,591.3	6,343.4	6,407.0	7,137.2	600.0	24,078.9
	3,591.3	6,343.4	6,407.0	7,137.2	600.0	24,078.9

Proposed FY 2006/07 Capital Improvement Plan (CIP)

Projects by Department / Project Name

Water Resources Department

TEMP526 - Water Campus Chlorine Generation

Est. Completion: 12/08 Est. ITD Expenditures (2/06): \$0.0 Operating Impact: \$0.0

Location: 8787 E. Hualapai

Description: The City Water Department has been investigating the possibility of changing from ordering chlorine gas to the Water Campus to on-site generation of chlorine. The method of on-site generation is a safer alternative. The City's Water Department reviewed safety issues at the Water Campus, and determined that the Chlorine system needs modification on how it is being stored. After studying the current system and investigating alternatives, it was determined that on-site generation is a much safer solution.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Sewer Rates	0.0	5,000.0	0.0	0.0	0.0	5,000.0
Water Rates	0.0	5,000.0	0.0	0.0	0.0	5,000.0
	0.0	10,000.0	0.0	0.0	0.0	10,000.0

TEMP527 - Advance Water Treatment Plant - Phase 4

Est. Completion: 12/13 Est. ITD Expenditures (2/06): \$0.0 Operating Impact: \$0.0

Location: 8787 E. Hualapai

Description: The master plan for the Water Campus calls for the expansion to a 20 mgd plant by 2013/2014. This project will allow for further purification of reclaimed water prior to recharge into vadose zone wells. Elements of the project include expanded microfiltration and reverse osmosis buildings, additional pumps for the product water, additional recharge wells, and related electrical, piping and instrumentation capabilities.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Resource Development Fees	0.0	0.0	0.0	0.0	2,000.0	2,000.0
	0.0	0.0	0.0	0.0	2,000.0	2,000.0

TEMP528 - Water Quality Regulatory Compliance Programs

Est. Completion: 06/07 Est. ITD Expenditures (2/06): \$0.0 Operating Impact: \$0.0

Location: 8787 E. Hualapai

Description: The Regulatory Compliance Group manages the scheduling and sampling for compliance monitoring of wells, ground and surface water treatment plants, and the water distribution system sampling stations. A manual system is currently used to track all the monitoring requirements at these facilities. This project will allow the regulatory compliance group the use of a database to track the sampling and monitoring requirements through an automated system.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Rates	1,500.0	0.0	0.0	0.0	0.0	1,500.0
	1,500.0	0.0	0.0	0.0	0.0	1,500.0

Proposed FY 2006/07 Capital Improvement Plan (CIP)

Projects by Department / Project Name

Water Resources Department

TEMP530 - Well Sites Rehabilitation

Est. Completion: NA **Est. ITD Expenditures (2/06):** \$0.0 **Operating Impact:** \$0.0

Location: Citywide

Description: The wells in the City system are aging and need rehabilitation. The wells will be analyzed, chemically or mechanically cleaned and rehabilitated as necessary. The wells in the City are beneficial for future water needs of the City of Scottsdale and need to be working for peak water demands for summer use.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Rates	500.0	500.0	1,500.0	500.0	500.0	3,500.0
	500.0	500.0	1,500.0	500.0	500.0	3,500.0

V0203 - Pump Station 97 (RWDS B) Modifications

Est. Completion: 06/06 **Est. ITD Expenditures (2/06):** \$97.0 **Operating Impact:** \$0.0

Location: Pima Road - 1/2 mile south of Pinnacle Peak Road

Description: Modify existing Pump Station #97 (RWDS Pump Station "B") to be an enclosed structure. This project will enable the City to enclose the Pump Station with a roof to minimize noise in the vicinity of the pump station.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
RWDS Fund	500.0	0.0	0.0	0.0	0.0	500.0
	500.0	0.0	0.0	0.0	0.0	500.0

V0204 - Advanced Water Treatment Plant – Phase 3

Est. Completion: 06/06 **Est. ITD Expenditures (2/06):** \$9,241.7 **Operating Impact:** \$0.0

Location: Pima Road and Haulapai

Description: Expansion of the Advanced Water Treatment Facility from 12 to 16 million gallons per day capacity to provide adequate advanced treatment for recharge of water for future use.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
MPC Bonds	4,360.8	0.0	0.0	0.0	0.0	4,360.8
Sewer Development Fees	3,473.2	0.0	0.0	0.0	0.0	3,473.2
Water Resource Development Fees	5,266.0	0.0	0.0	0.0	0.0	5,266.0
	13,100.0	0.0	0.0	0.0	0.0	13,100.0

Proposed FY 2006/07 Capital Improvement Plan (CIP)

Projects by Department / Project Name

Water Resources Department

V0205 - Water Reclamation Plant – Phase 3

Est. Completion: 06/06 Est. ITD Expenditures (2/06): \$19,701.3 Operating Impact: \$0.0

Location: 8787 E. Hualapai Drive

Description: Expansion of the Water Campus Wastewater Reclamation Plant from 12 to 20 million gallons per day capacity to meet planned demand. Additional facilities would consist of a primary and secondary sedimentation basin, aeration basin, filtration basins and the associated pumps, electrical and instrumentation features.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
MPC Bonds	14,374.5	0.0	0.0	0.0	0.0	14,374.5
Sewer Development Fees	6,375.5	0.0	0.0	0.0	0.0	6,375.5
	20,750.0	0.0	0.0	0.0	0.0	20,750.0

V0401 - Pump Station 96 (RWDS A) Modifications

Est. Completion: 06/06 Est. ITD Expenditures (2/06): \$404.0 Operating Impact: \$0.0

Location: Hualapai Drive and Pima Road

Description: Perform metering improvements at Reclaimed Water Distribution System (RWDS) Pump Station #96 (RWDS Pump Station "A") to more accurately account for non-potable water deliveries to RWDS users. These improvements were recommended in a metering study performed by Greeley and Hansen Engineers

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
RWDS Fund	500.0	0.0	0.0	0.0	0.0	500.0
	500.0	0.0	0.0	0.0	0.0	500.0

V0402 - SROG SRO Sewer Line

Est. Completion: NA Est. ITD Expenditures (2/06): \$7,795.9 Operating Impact: \$0.0

Location: 91st Avenue in Phoenix

Description: Provides for modifications and improvements to the Salt River Outfall (SRO) sewer line which transmits sewer flow approximately 26 miles from Scottsdale's City limits to the Multi-City 91st Avenue Wastewater Treatment Plant located in Phoenix. The City of Scottsdale's proportionate cost share is derived through existing intergovernmental agreements with the Multi-City Sub-Regional Operating Group (SROG).

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Sewer Rates	11,517.0	2,750.0	170.5	1,397.0	0.0	15,834.5
	11,517.0	2,750.0	170.5	1,397.0	0.0	15,834.5

Proposed FY 2006/07 Capital Improvement Plan (CIP)

Projects by Department / Project Name

Water Resources Department

V0501 - Core North/South Sewer

Est. Completion: 12/09 **Est. ITD Expenditures (2/06):** \$0.0 **Operating Impact:** (07/08) \$10.0

Location: Stacked 40 boundary to Hayden Road

Description: Construct sewer lines within the Stacked 40s northern and southern areas consistent with the development agreement. Advanced construction of streets within the Core North and Core South area by the City will require concurrent installation of sewer lines to provide service for future adjacent development.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Sewer Development Fees	2,598.0	0.0	0.0	0.0	0.0	2,598.0
	2,598.0	0.0	0.0	0.0	0.0	2,598.0

V0502 - RWDS Improvements

Est. Completion: 06/07 **Est. ITD Expenditures (2/06):** \$0.0 **Operating Impact:** \$0.0

Location: North of CAP Canal

Description: Provides for improvements to Reclaimed Water Distribution System (RWDS) pipeline pump stations and reservoirs. This project will be fully funded by the golf courses receiving reclaimed effluent from the Water Campus through the RWDS.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
RWDS Fund	1,350.0	0.0	0.0	0.0	0.0	1,350.0
	1,350.0	0.0	0.0	0.0	0.0	1,350.0

V0703 - Sewer Oversizing

Est. Completion: 06/10 **Est. ITD Expenditures (2/06):** \$1,447.5 **Operating Impact:** \$0.0

Location: Citywide

Description: Provides funds for the City to oversize lines and facilities to meet future ultimate capacity to Master Plan standards. The money is used when a resident / developer is required to extend the sewer line (typically a 8" sewer line), and the city wishes to have a larger sewer line installed, than the resident needs.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
GO Bonds	192.3	0.0	0.0	0.0	0.0	192.3
Sewer Development Fees	1,793.4	0.0	0.0	0.0	0.0	1,793.4
	1,985.7	0.0	0.0	0.0	0.0	1,985.7

Proposed FY 2006/07 Capital Improvement Plan (CIP)

Projects by Department / Project Name

Water Resources Department

V2101 - Miller Road Sewer – Phase 3

Est. Completion: 06/07 **Est. ITD Expenditures (2/06):** \$150.8 **Operating Impact:** (07/08) \$2.0

Location: Miller Road and McKellips

Description: Replacement of the existing sewer line in Miller Road from McDowell Road south to the Princess Metering Station to accommodate growth and revitalization impacts. The Miller Road sewer is the major sewer trunk line which services the southwest core of the City of Scottsdale. Redevelopment plans in the Downtown and Los Arcos areas are underway.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Sewer Development Fees	5,300.0	0.0	0.0	0.0	0.0	5,300.0
	5,300.0	0.0	0.0	0.0	0.0	5,300.0

V3704 - Sewer Collection System Improvements

Est. Completion: 06/10 **Est. ITD Expenditures (2/06):** \$5,354.3 **Operating Impact:** \$0.0

Location: Citywide

Description: Design and construct sewer lines and rehabilitate sewer manholes in the aging sewer system. Many of the sewer lines in the city have been in use for an extended period of time. The City is being pro-active to eliminate problems in the sewer system. This project will be used to replace undersized sewer lines, and inspect and rehabilitate sewer manholes that develop problems. The sewer lines are also to be televised to find potential problems and will be documented. The video taped lines will be reviewed, and design will be initiated to correct the problem.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Sewer Rates	10,810.8	650.0	600.0	700.0	2,500.0	15,260.8
	10,810.8	650.0	600.0	700.0	2,500.0	15,260.8

V4001 - Radio Telemetry Monitoring Automation Citywide (Sewer)

Est. Completion: 06/10 **Est. ITD Expenditures (2/06):** \$395.9 **Operating Impact:** (07/08) \$4.0

Location: Citywide

Description: Construct radio telemetry facilities at new and existing wastewater facilities to continue to improve operational efficiency through automation.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Sewer Rates	705.5	50.0	50.0	50.0	0.0	855.5
	705.5	50.0	50.0	50.0	0.0	855.5

Proposed FY 2006/07 Capital Improvement Plan (CIP) Projects by Department / Project Name

Water Resources Department

V6402 - SROG WWTP

Est. Completion: NA **Est. ITD Expenditures (2/06):** \$43,406.3 **Operating Impact:** \$0.0
Location: 91st Avenue in Phoenix
Description: Provides for modifications and improvements at the Multi-City 91st Avenue Wastewater Treatment Plant located in Phoenix. The City of Scottsdale's proportionate cost share is derived through existing intergovernmental agreements with the Multi-City Sub-Regional Operating Group (SROG).

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Sewer Rates	6,163.4	4,210.5	4,608.0	3,817.6	10,000.0	28,799.5
	6,163.4	4,210.5	4,608.0	3,817.6	10,000.0	28,799.5

V8620 - Master Plan – Sewer

Est. Completion: 06/07 **Est. ITD Expenditures (2/06):** \$383.4 **Operating Impact:** \$0.0
Location: Citywide
Description: Provides for master plan updates for wastewater system management needs including Federal regulatory impacts and capital project needs.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Sewer Development Fees	1,883.4	250.0	0.0	0.0	250.0	2,383.4
	1,883.4	250.0	0.0	0.0	250.0	2,383.4

V9901 - SROG WWTP – UP01/UP05 Expansion

Est. Completion: 06/10 **Est. ITD Expenditures (2/06):** \$38,220.9 **Operating Impact:** \$0.0
Location: 91st Avenue in Phoenix
Description: Provides for additional sewer flow and solids handling capacity through contribution to the capital improvements at the Multi-City 91st Avenue Wastewater Treatment Plant located in Phoenix. Capacity expansion is due to planned increased demand. The City of Scottsdale's proportionate cost share is derived through existing intergovernmental agreements with the Multi-City Sub-Regional Operating Group (SROG).

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Sewer Development Fees	51,312.7	3,826.1	4,955.8	2,303.4	900.0	63,298.0
	51,312.7	3,826.1	4,955.8	2,303.4	900.0	63,298.0

Proposed FY 2006/07 Capital Improvement Plan (CIP)

Projects by Department / Project Name

Water Resources Department

V9908 - Relief Sewers – Citywide

Est. Completion: 06/10 Est. ITD Expenditures (2/06): \$1,841.0 Operating Impact: (07/08) \$2.0

Location: Citywide

Description: Design and construction of relief sewer capacity at various locations throughout the City as the need is identified in the capital program. Unforeseen relief sewer capacity can become an issue because of, for example, an unusual increase in development pressure in an area; more wastewater intensive use in an area, or because of lagging private development improvements.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Sewer Development Fees	1,621.6	500.0	500.0	500.0	0.0	3,121.6
	1,621.6	500.0	500.0	500.0	0.0	3,121.6

W0202 - CAP Plant Regulatory Compliance

Est. Completion: 06/08 Est. ITD Expenditures (2/06): \$43,921.5 Operating Impact: (07/08) \$1,300.0

Location: Union Hills and Pima

Description: Addition of granular activated carbon facility at the CAP Water Treatment Plant in order to ensure compliance with the new Federal water quality rule regarding disinfection by-products (DBP). The use of surface water will also require the addition of a granular activated carbon facility to the plant, in order to comply with the Federal rule regarding disinfection by-products. The Rule was finalized during Fall 2005, and municipalities will need to meet the 120 parts-per-billion by fall 2008. The second part of the rule requires municipalities to meet the 80 parts-per-billion by fall 2011.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
MPC Bonds	28,266.4	0.0	0.0	0.0	0.0	28,266.4
Water Development Fees	18,562.5	0.0	0.0	0.0	0.0	18,562.5
Water Rates	12,571.1	0.0	0.0	0.0	0.0	12,571.1
	59,400.0	0.0	0.0	0.0	0.0	59,400.0

W0205 - Water Quality Improvements – Southern Neighborhoods

Est. Completion: 06/10 Est. ITD Expenditures (2/06): \$2,944.9 Operating Impact: \$0.0

Location: Thomas Road and Pima Freeway

Description: Provides for improvements to the City's existing Superfund Central Groundwater Treatment Facility to address EPA mandated arsenic and nitrate levels in drinking water. In addition, the project will improve the quality of potable water being produced at this site, by reducing total dissolved solids and hardness. This project will also reduce the excessive reservoir scaling currently experienced.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Development Fees	400.0	0.0	0.0	0.0	0.0	400.0
Water Rates	13,100.0	0.0	0.0	0.0	0.0	13,100.0
	13,500.0	0.0	0.0	0.0	0.0	13,500.0

Proposed FY 2006/07 Capital Improvement Plan (CIP)

Projects by Department / Project Name

Water Resources Department

W0301 - CAP Water Connection – Shea to McDonald

Est. Completion: 06/06 **Est. ITD Expenditures (2/06):** \$11,624.8 **Operating Impact:** \$0.0

Location: Pima Freeway and Shea

Description: Construction of four miles of water mains in order to deliver CAP drinking water in south-central Scottsdale. Includes one mile of 20" water transmission main on Shea Boulevard from the Pima Freeway to Hayden Road. and three miles of 30" main on Hayden Road from Shea Boulevard to the Arizona Canal.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Development Fees	220.0	0.0	0.0	0.0	0.0	220.0
Water Rates	12,780.0	0.0	0.0	0.0	0.0	12,780.0
	13,000.0	0.0	0.0	0.0	0.0	13,000.0

W0302 - Chaparral WTP Water Distribution System

Est. Completion: 06/06 **Est. ITD Expenditures (2/06):** \$9,610.0 **Operating Impact:** (07/08) \$2.0

Location: Multiple locations

Description: Construction of two miles of 42" water transmission main on Hayden Road from McDonald Drive to Indian School Road in order to deliver water from the new Chaparral Water Treatment Plant to customers in that area.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
MPC Bonds	8,168.3	0.0	0.0	0.0	0.0	8,168.3
Water Rates	1,331.7	0.0	0.0	0.0	0.0	1,331.7
	9,500.0	0.0	0.0	0.0	0.0	9,500.0

W0303 - Security Enhancements

Est. Completion: 06/10 **Est. ITD Expenditures (2/06):** \$720.5 **Operating Impact:** (07/08) \$2.0

Location: Citywide

Description: Provides for security enhancements at water and wastewater facilities identified in the Water Resources Vulnerability Assessment, including upgrade of existing prevention, detection and response systems as needed.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Rates	1,550.0	350.0	350.0	350.0	350.0	2,950.0
	1,550.0	350.0	350.0	350.0	350.0	2,950.0

Proposed FY 2006/07 Capital Improvement Plan (CIP)

Projects by Department / Project Name

Water Resources Department

W0304 - Zone 12-13 Water Transmission Lines

Est. Completion: 02/07 **Est. ITD Expenditures (2/06):** \$4,386.1 **Operating Impact:** (07/08) \$5.0

Location: 114th Street and Dixileta Drive

Description: Design and construct two Zone 12 water transmission lines, with pump stations, in 114th Street from Dynamite Blvd. to the new reservoir site at the SWC of 114th St. and Dixileta Drive (approximately 10,000 LF). Construct approximately 18,500 LF of Zone 13 water line from the new reservoir site to 118th Street and then south along 118th Street to Happy Valley Road. Construction of a water transmission lines in 128th Street from Dynamite Boulevard, south.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Development Fees	8,280.0	0.0	0.0	0.0	0.0	8,280.0
	8,280.0	0.0	0.0	0.0	0.0	8,280.0

W0401 - Union Hills to Hualapai Transmission Line – Pima Rd.

Est. Completion: 06/06 **Est. ITD Expenditures (2/06):** \$91.4 **Operating Impact:** \$0.0

Location: Pima Road from Union Hills to Hualapai

Description: Construct a water transmission main from the Water Campus via Booster Pump Station #55B to the reservoirs in the DC Ranch Development to meet planned demand in the area.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Development Fees	2,650.0	0.0	0.0	0.0	0.0	2,650.0
	2,650.0	0.0	0.0	0.0	0.0	2,650.0

W0501 - Core North/South Water

Est. Completion: 12/09 **Est. ITD Expenditures (2/06):** \$23.5 **Operating Impact:** (07/08) \$10.0

Location: Stacked 40 boundary to Hayden Road

Description: Construct water lines within the Stacked 40s northern and southern areas consistent with the development agreement. Advanced construction of streets within the Core North and Core South area by the City will require concurrent installation of water lines to provide service for future adjacent development. These lines are normally installed by the development community.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Development Fees	2,598.0	0.0	0.0	0.0	0.0	2,598.0
	2,598.0	0.0	0.0	0.0	0.0	2,598.0

Proposed FY 2006/07 Capital Improvement Plan (CIP)

Projects by Department / Project Name

Water Resources Department

W0502 - Inner Circle Booster Pump Station

Est. Completion: 07/06 **Est. ITD Expenditures (2/06):** \$2,681.6 **Operating Impact:** (07/08) \$2.0

Location: Inner Circle Drive and Pima

Description: Design and construct a new booster pump station at Inner Circle Drive and Pima Road to deliver water from the new Chaparral Water Treatment Plant to Shea Boulevard and Pima Freeway areas. This project is required for back up to the CAP water deliveries in the Shea Boulevard area east of Pima Road.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Rates	3,400.0	0.0	0.0	0.0	0.0	3,400.0
	3,400.0	0.0	0.0	0.0	0.0	3,400.0

W0503 - Regional GAC Regeneration Facility

Est. Completion: 12/07 **Est. ITD Expenditures (2/06):** \$0.0 **Operating Impact:** (07/08) \$750.0

Location: Outside of Scottsdale – exact location not yet determined

Description: Provides for the City's share of costs for a regional Granular Activated Carbon (GAC) Regeneration Facility. Due to the unfunded Federal water quality disinfection by-product rule, the treatment technology utilizes granular activated carbon (GAC). In contrast to purchasing new raw material when needed, GAC can be regenerated off-site resulting in considerable operational cost savings. This regional facility is proposed to be jointly funded by the communities of Phoenix, Scottsdale, Mesa, Tempe, Glendale, Chandler and Peoria. The GAC will be utilized in the water treatment process at the CAP Water Treatment Plant and at the Chaparral Water Treatment Plant.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Development Fees	1,200.0	0.0	0.0	0.0	0.0	1,200.0
Water Rates	3,450.0	0.0	0.0	0.0	0.0	3,450.0
	4,650.0	0.0	0.0	0.0	0.0	4,650.0

W0504 - CAP Plant Expansion

Est. Completion: 04/09 **Est. ITD Expenditures (2/06):** \$5,517.6 **Operating Impact:** (09/10) \$1,701.0

Location: Union Hills and Pima Rd.

Description: Expansion of the existing CAP Water Treatment Plant from its current capacity of 50 million gallons per day (mgd) to a minimum capacity of 75 mgd to meet required standards. This expansion is required due to the recent decision by USEPA to lower the standards for acceptable levels of arsenic in ground water. Treating additional wells for arsenic removal is cost prohibitive. The expanded use of surface water will also expedite the City's compliance with the AZ Groundwater Management Act of 1980. This expansion will aid the assured water supply the City is required to meet. This will further reduce the use of groundwater and increase use of surface water.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Development Fees	64,000.0	0.0	0.0	0.0	0.0	64,000.0
Water Rates	16,000.0	0.0	0.0	0.0	0.0	16,000.0
	80,000.0	0.0	0.0	0.0	0.0	80,000.0

Proposed FY 2006/07 Capital Improvement Plan (CIP)

Projects by Department / Project Name

Water Resources Department

W0601 - RWDS Water Quality Improvements

Est. Completion: 04/10 Est. ITD Expenditures (2/06): \$0.0 Operating Impact: \$0.0

Location: Union Hills and Pima Rd.

Description: Provides for system modifications to improve water quality for the Reclaimed Water Distribution System (RWDS) golf courses. This project will be fully funded by the golf courses receiving reclaimed effluent from the Water Campus RWDS. The project will consist of improvements to the Advanced Water Treatment (AWT) Facility at the Water Campus that will reduce the salinity in the golf course reclaimed effluent deliveries. As increases in the salinity of RWDS water deliveries has made it difficult for the golf courses to grow turf, this project will address these issues. The project also includes funding for a brine management program in later years (FY 2009/10). The brine management program will deal with the waste stream from the AWT that in the interim will be placed into the sewer system.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Contributions	25,800.0	0.0	0.0	16,900.0	0.0	42,700.0
	25,800.0	0.0	0.0	16,900.0	0.0	42,700.0

W0602 - Water Quality Laboratory Instrumentation

Est. Completion: 06/06 Est. ITD Expenditures (2/06): \$0.0 Operating Impact: (07/08) \$25.0

Location: Citywide

Description: Purchase specialized laboratory equipment to identify a wider range of water contaminants in order to insure the safety and health of the City's drinking water.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Rates	580.0	0.0	0.0	0.0	0.0	580.0
	580.0	0.0	0.0	0.0	0.0	580.0

W0603 - Zone 14-16 Water Improvements

Est. Completion: 06/07 Est. ITD Expenditures (2/06): \$350.5 Operating Impact: \$0.0

Location: Carefree Highway and Bartlett Road

Description: Design and construct a 2.5 million gallon reservoir, booster pump station and install approximately 10,000 lineal feet of 16" water line in Carefree Highway to Bartlett Road to serve Wildcat Hills in the far reaches of the City limits.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Development Fees	10,000.0	0.0	0.0	0.0	0.0	10,000.0
	10,000.0	0.0	0.0	0.0	0.0	10,000.0

Proposed FY 2006/07 Capital Improvement Plan (CIP)

Projects by Department / Project Name

Water Resources Department

W0710 - Water Oversizing

Est. Completion: 06/10 **Est. ITD Expenditures (2/06):** \$6,777.3 **Operating Impact:** \$0.0
Location: Citywide
Description: Provides funds for the City to oversize lines and facilities to meet future ultimate capacity to Master Plan standards. The money is used when a resident / developer is required to extend the waterline (typically a 6" waterline), and the city wishes to have a larger water line installed (typically a 12" waterline) than the resident needs.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Development Fees	8,204.5	0.0	0.0	0.0	0.0	8,204.5
	8,204.5	0.0	0.0	0.0	0.0	8,204.5

W2105 - Alameda/122nd Street Booster Pump Station

Est. Completion: 06/07 **Est. ITD Expenditures (2/06):** \$18.6 **Operating Impact:** (07/08) \$16.0
Location: Alameda Road and 122nd Street
Description: Construct a 1.5 million gallons per day water booster pump station to deliver CAP water to zones 11, 12 and 13 in the area between Jomax Road, the existing Preserve, the designated Preserve Initiative area and 118th Street.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Development Fees	1,550.0	0.0	0.0	0.0	0.0	1,550.0
	1,550.0	0.0	0.0	0.0	0.0	1,550.0

W2106 - Arsenic Mitigation Treatment

Est. Completion: 06/12 **Est. ITD Expenditures (2/06):** \$71,262.2 **Operating Impact:** (07/08) \$1,500.0
Location: Multiple locations
Description: Design and construct arsenic removal treatment facilities and related distribution systems at various satellite sites throughout the City to comply with the Safe Drinking Water Act Arsenic Rule. The Safe Drinking Water Act lowered the maximum allowable levels for arsenic in drinking water from 50 ppb to 10 ppb as of January 2006. This new level for arsenic will require the City to utilize arsenic mitigation treatment systems in accordance with the 2001 Water Resources Master Plan.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
MPC Bonds	63,233.6	0.0	0.0	0.0	0.0	63,233.6
Water Rates	25,266.4	0.0	0.0	0.0	10,000.0	35,266.4
	88,500.0	0.0	0.0	0.0	10,000.0	98,500.0

Proposed FY 2006/07 Capital Improvement Plan (CIP)

Projects by Department / Project Name

Water Resources Department

W3705 - Architect/Engineer Services

Est. Completion: 06/10 Est. ITD Expenditures (2/06): \$1,693.3 Operating Impact: \$0.0

Location: Citywide

Description: Provides for consulting/engineering services on an as needed basis for minor future studies, planning or design. The department requires an architect/engineer of a certain background to aid the department in technical analysis. These are usually projects that require immediate attention.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Development Fees	1,860.0	0.0	150.0	0.0	150.0	2,160.0
	1,860.0	0.0	150.0	0.0	150.0	2,160.0

W4001 - Radio Telemetry Monitoring Automation Citywide (Water)

Est. Completion: 06/10 Est. ITD Expenditures (2/06): \$801.4 Operating Impact: (07/08) \$5.0

Location: Citywide

Description: Construct radio telemetry facilities at new and existing water facilities to continue to improve operational efficiency through automation.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Rates	1,189.4	125.0	125.0	125.0	0.0	1,564.4
	1,189.4	125.0	125.0	125.0	0.0	1,564.4

W4702 - Chaparral WTP Influent Waterline

Est. Completion: 07/06 Est. ITD Expenditures (2/06): \$5,181.7 Operating Impact: (07/08) \$1.0

Location: 82nd Street west of canal, south on 82nd Street, across McDonald Drive to Chaparral WTP

Description: Construction of a new 54-inch diameter influent waterline to move the City's Salt River Project allocation from the Arizona Canal to the new Chaparral Water Treatment Plant.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Development Fees	524.3	0.0	0.0	0.0	0.0	524.3
Water Rates	4,718.5	0.0	0.0	0.0	0.0	4,718.5
	5,242.8	0.0	0.0	0.0	0.0	5,242.8

Proposed FY 2006/07 Capital Improvement Plan (CIP)

Projects by Department / Project Name

Water Resources Department

W4708 - Well Sites

Est. Completion: 06/10 **Est. ITD Expenditures (2/06):** \$14,656.5 **Operating Impact:** (07/08) \$20.0

Location: Multiple locations

Description: Design and construct new wells and upgrade existing wells at locations determined consistent with the Master Plan for water system demand. The City will still need to replace existing wells once the well has reached its useful life, a new well will be needed to replace it.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Development Fees	21,142.1	3,000.0	1,000.0	3,000.0	0.0	28,142.1
	21,142.1	3,000.0	1,000.0	3,000.0	0.0	28,142.1

W6160 - Water Rights Acquisition

Est. Completion: 06/07 **Est. ITD Expenditures (2/06):** \$41,915.6 **Operating Impact:** \$0.0

Location: Multiple locations

Description: Provides for acquisition, development and management of water resources to meet requirements of build-out demands, securing a long-term assured water supply and the Congressional passage of the Arizona Water Settlement Act and signing of the Gila River Indian Community Agreement Water Lease.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Resource Development Fees	66,245.0	0.0	0.0	0.0	0.0	66,245.0
	66,245.0	0.0	0.0	0.0	0.0	66,245.0

W8515 - Deep Well Recharge/Recovery Facilities

Est. Completion: 06/09 **Est. ITD Expenditures (2/06):** \$729.0 **Operating Impact:** (07/08) \$2.0

Location: Multiple locations

Description: Design and construct deep well water recharge and recovery facilities to ensure the long-term sustainability of the City's northern well field. The city will continue to use wells in its system to supply water to the community. For the city's 100 year water supply, the city is required to recharge water into its aquifers. This program will determine the best areas for this to occur. Initial testing has been completed, but the city would like to explore options further north of the Water Campus for this procedure. An application for matching funds has been applied for with the Department of Water Resources to complete this study.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Resource Development Fees	4,100.0	0.0	1,000.0	0.0	0.0	5,100.0
	4,100.0	0.0	1,000.0	0.0	0.0	5,100.0

Proposed FY 2006/07 Capital Improvement Plan (CIP)

Projects by Department / Project Name

Water Resources Department

W8525 - Master Plan – Water

Est. Completion: 06/07 Est. ITD Expenditures (2/06): \$766.8 Operating Impact: \$0.0

Location: Citywide

Description: Provides for master plan updates for water system management needs including Federal regulatory impacts and capital project needs. This program also includes the Asset Management Program, where the department will look at the entire water system for areas that need rehabilitation.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Development Fees	1,505.8	400.0	0.0	0.0	500.0	2,405.8
Water Resource Development Fees	161.0	0.0	0.0	0.0	0.0	161.0
	1,666.8	400.0	0.0	0.0	500.0	2,566.8

W8570 - Waterline Replacements

Est. Completion: 06/09 Est. ITD Expenditures (2/06): \$16,495.6 Operating Impact: (07/08) \$3.0

Location: Citywide

Description: Design and construct waterline repair/replacement projects at various locations throughout the City to upgrade existing plastic water lines to acceptable standards.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Rates	16,491.0	0.0	0.0	0.0	0.0	16,491.0
	16,491.0	0.0	0.0	0.0	0.0	16,491.0

W9903 - Booster Station Upgrades

Est. Completion: 06/10 Est. ITD Expenditures (2/06): \$325.2 Operating Impact: (07/08) \$2.0

Location: Multiple locations

Description: Upgrade components of the water production system as needed to meet system demands. Booster pump stations are reaching capacity and additional pumps are required to meet demands. At some of the booster pump stations, the equipment is dated, and parts are no longer available, so new equipment is required.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Development Fees	575.0	0.0	0.0	0.0	0.0	575.0
	575.0	0.0	0.0	0.0	0.0	575.0

Proposed FY 2006/07 Capital Improvement Plan (CIP)

Projects by Department / Project Name

Water Resources Department

W9911 - Chaparral Water Treatment Plant

Est. Completion: 06/06 **Est. ITD Expenditures (2/06):** \$83,318.6 **Operating Impact:** (07/08) \$200.0

Location: East of southeast corner of Hayden Road /McDonald Drive

Description: Construction of the new Chaparral Water Treatment Plant to treat the City's Salt River Project allocation. The capacity is 30 million gallons per day, which is sufficient to meet projected demands south of the Arizona Canal. This plant is located on the southeast corner of Hayden Road and McDonald Drive.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
GO Bonds	1,300.0	0.0	0.0	0.0	0.0	1,300.0
MPC Bonds	48,724.0	0.0	0.0	0.0	0.0	48,724.0
Water Development Fees	2,064.3	0.0	0.0	0.0	0.0	2,064.3
Water Rates	31,494.1	0.0	0.0	0.0	0.0	31,494.1
	83,582.4	0.0	0.0	0.0	0.0	83,582.4

W9912 - Water Distribution System Improvements

Est. Completion: 06/10 **Est. ITD Expenditures (2/06):** \$13,426.2 **Operating Impact:** \$0.0

Location: Citywide

Description: Provides for water distribution system improvements needed due to age of the system and increasing demand. Includes replacement of mains, meters and valves, as well as design and construction of new water mains at various locations throughout the distribution system to improve service and to reduce operating costs. Replacement of existing small mains (4" and smaller) is required to meet fire flow requirements as set forth by Ordinance. With the redevelopment of the downtown area, the water infrastructure needs to be upgraded to meet all fire demands on the system. A portion of this budget is being increased to handle those upgrades.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Development Fees	5,000.0	0.0	0.0	0.0	0.0	5,000.0
Water Rates	16,282.2	1,250.0	2,000.0	1,250.0	2,000.0	22,782.2
	21,282.2	1,250.0	2,000.0	1,250.0	2,000.0	27,782.2

W9913 - Zone 12-13 Water System Improvements

Est. Completion: 06/06 **Est. ITD Expenditures (2/06):** \$6,846.1 **Operating Impact:** \$0.0

Location: 114th Street and Dixileta Drive

Description: Construction of a 3 million gallon Zone 12 reservoir in the vicinity of 114th Street and Dixileta Drive and the Zone 13 booster pump station at Alma School Road and Dixileta Drive.

Funding Sources (in thousands of dollars)	Proposed FY06/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Total
Water Development Fees	8,528.0	0.0	0.0	0.0	0.0	8,528.0
	8,528.0	0.0	0.0	0.0	0.0	8,528.0